AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. - 15. (Canceled)

- 16. (previously presented) The method of claim 20, wherein the sensor acquires MEG data.
- 17. (previously presented) The method of claim 20, wherein the sensor acquires EEG data.
- 18. (previously presented) The method of claim 20, wherein the sensor acquires ECG data.
- 19. (previously presented) The method of claim 20, wherein the sensor acquires MCG data.
 - 20. (currently amended): A method of evaluation comprising: acquiring an electromagnetic physiological signal with a sensor on a subject;

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performing a source reconstruction of the electromagnetic physiological signal via a signal processing circuit in communication with said sensor, with said circuit including a computer system with a processor and a memory, the computer system being configured to support multiple parallel threads of execution with one thread being a measurement module and a second thread being a source reconstruction module;

feeding source reconstruction data through a feedback loop to the measurement module to modify the analysis of a new electromagnetic physiological signal, wherein the new electromagnetic physiological signal is being acquired while the source reconstruction is being performed; and

displaying source reconstruction results overlayed onto anatomical data of said patient.

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